



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/893,590	06/29/2001	Janne Aaktonen	367.40294X00	5624	
20457	7590 06/17/2005		EXAM	INER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP			GESESSE,	GESESSE, TILAHUN	
SUITE 1800			ART UNIT	PAPER NUMBER	
ARLINGTO	N, VA 22209-3873		2684		

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/893,590	AALTONEN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Tilahun B Gesessse	2684			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 18 April 2005.					
2a) This action is <b>FINAL</b> . 2b) ☑ This	s action is non-final.				
· · ·	) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4)  Claim(s) 1-41 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-41 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.					
Application Papers		•			
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	• • • • • • • • • • • • • • • • • • • •	, ,			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date					
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	_	ratent Application (PTO-152)			

### **DETAILED ACTION**

1. This is in response to applicant's argument filed April 18,2005, in which claims 1 through 41 are pending.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1- 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostreski et al (US patent no. 5651010) in view of Bodin et al (US patent No. 5241685).

Regarding claim 1,Kostreski discloses a broadcast system for delivering content to a terminal (abstract), including a plurality of transmitters (TX1-TX3), and a network controller (5) responsive to distribution of demand of specific content to (column 7, line 1-45 and figure 4).

Kostreski does not teach the network defines the topology of region by varying the transmission characteristics.

However, Bodin et al teaches the network defines the topology of region by varying the transmission characteristics (column 5, lines 41-46 and figure 2 reducing the size of cell by dynamically varying the entering threshold of cells). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention

Application/Control Number: 09/893,590

Art Unit: 2684

was made to define the topology of region by dynamically varying cell size, as evidenced by Bodin, for the terminal to receive quality content of the transmission and avoid interference that causes by neighboring cell transmitters.

As to claim 2, Kostreski discloses signaling means providing information relating to the network topology for delivery to a terminal (column 7, lines 1-45 and figure 4).

As to claims 3-4,21-22, Kostreski does not teach the network defines the topology of region by varying the transmission characteristics.

However, Bodin et al teaches the network defines the topology of region by varying the transmission characteristics (column 5, lines 41-46 and figure 2 reducing the size of cell by dynamically varying the entering threshold of cells). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to define the topology of region by dynamically varying cell size, as evidenced by Bodin, for the terminal to receive quality content of the transmission and avoid interference that causes by neighboring cell transmitters.

As to claim 5,24-26, Kostreski discloses transmitter-delivering content to an area overlying at least the network topology determined by the controller (figures 4 and 5).

As to claim 6,23, Kostreski discloses the network controller (5) is operable modify topology to deliver, in at least one cell, the content being delivered by the further transmitter (either using relay network or using overlap cells column 7, line 1- 45 and figures 4 and 5).

As to claim 7, 27-31, Kostreski discloses at least two transmitters comprise the plurality of transmitters (figure 4).

Application/Control Number: 09/893,590

Art Unit: 2684

As to claim 8,32-36, Kostreski discloses the transmitters characteristics are varying in respect of one transmission power (column 7, lines 1-45 and figure 5).

As to claim 9, kostreski discloses a method of delivering content to terminals over a network whose topology is defined by the transmission characteristics of a plurality of transmitters (column 7, lines1- 45 and figures4), comprising analyzing the content to be delivered (column 7, lines1-45).

Kostreski does not teach the network defines the topology of region by varying the transmission characteristics.

However, Bodin et al teaches the network defines the topology of region by varying the transmission characteristics (column 5, lines 41-46 and figure 2 reducing the size of cell by dynamically varying the entering threshold of cells). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to define the topology of region by dynamically varying cell size, as evidenced by Bodin, for the terminal to receive quality content of the transmission and avoid interference that causes by neighboring cell transmitters.

As to claims 10,38-40, Kostreski does not teach the network defines the topology of region by varying the transmission characteristics.

However, Bodin et al teaches the network defines the topology of region by varying the transmission characteristics (column 5, lines 41-46 and figure 2 reducing the size of cell by dynamically varying the entering threshold of cells). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to define the topology of region by dynamically varying cell size, as

Application/Control Number: 09/893,590

Art Unit: 2684

evidenced by Bodin, for the terminal to receive quality content of the transmission and avoid interference that causes by neighboring cell transmitters.

As to claim 11, Kostreski does not teach the network defines the topology of region by varying the transmission characteristics.

However, Bodin et al teaches the network defines the topology of region by varying the transmission characteristics (column 5, lines 41-46 and figure 2 reducing the size of cell by dynamically varying the entering threshold of cells). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to define the topology of region by dynamically varying cell size, as evidenced by Bodin, for the terminal to receive quality content of the transmission and avoid interference that causes by neighboring cell transmitters.

As to claims12-13,19-20 and 41, Kostreski discloses a computer program comprising executable code for execution when loaded on a computer, the computer is operable in accordance with the code to carry out the method according and computer readable medium(column (column 4, lines 1-15).

As to claims 14-18, Kostreski discloses a broadcast system (figure 4) having a plurality of transmitters (Tx1-TX3) for delivering content to terminals in respective locations each transmitter operating in accordance with a set of operational characteristics (column 7, lines 1-45) comprising: means for determining a distribution (5) of terminals for delivery of common content (see figure 4).

Kostreski does not teach the network defines the topology of region by varying the transmission characteristics.

Application/Control Number: 09/893,590 Page 6

Art Unit: 2684

However, Bodin et al teaches the network defines the topology of region by varying the transmission characteristics (column 5, lines 41-46 and figure 2 reducing the size of cell by dynamically varying the entering threshold of cells). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to define the topology of region by dynamically varying cell size, as evidenced by Bodin, for the terminal to receive quality content of the transmission and avoid interference that causes by neighboring cell transmitters.

As to claims 37, Kostreski discloses the transmitter characteristics are varied such that the cellular density of the topology is increased in an area where substantially different content is being delivered to terminals (peak data usage, typical by business customers, occur in the daytime, and peak interactive video usage by residential customers occurs at night, column 7 lines 1-56 and figure 4).

### Response to Arguments

Applicant's arguments with respect to claims 1-41 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

Art Unit: 2684

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Bel 5/31/05

Page 7